

ENGINEERING EXHIBIT

Request for Special Temporary Authorization prepared for

Television Station KTXA L.P.
KTXA(DT) Fort Worth, TX
Facility ID 51517

Television Station KTXA L.P. (“*KTXA*”) is the licensee of KTXA(DT), Fort Worth, TX, Facility ID 51517. During the pre-transition period, KTXA operated on digital Channel 18 (BLCDDT-20001130ACY). A Construction Permit (“CP”, BMPCDDT-20090504AAV) authorizes construction of the KTXA post-transition digital facility on Channel 19. KTXA is presently operating on Channel 19 pursuant to the CP and a license application is pending to cover the construction (BLCDDT-20090612AGF). This statement supports *KTXA*’s request for Special Temporary Authority (“STA”) to operate KTXA on Channel 18 with its pre-transition facility in lieu of Channel 19.

By way of background, Appendix B of the Seventh Report and Order in MB Docket 87-268 established KTXA’s post-transition digital allotment on its pre-transition digital Channel 18. The post-transition allotment for KTXA was subsequently changed to Channel 19 in MB Docket 08-148¹. *KTXA* requests an STA to operate on Channel 18 with its pre-transition facility as previously licensed (BLCDDT-20001130ACY, 220 kW, 535 m). The “Tech box” data within the STA request specifies the pre-transition licensed Channel 18 operation. *KTXA* will submit a petition for rulemaking that will request a change in KTXA’s channel to another UHF channel for permanent operation.

The purpose of the Channel 18 STA for KTXA is to vacate Channel 19 so that Channel 19 can be employed by station KTVT(DT) (Facility ID 23422, Fort Worth, TX). KTVT is under

¹*Amendment of Section 73.622(i), Final DTV Table of Allotments, Television Broadcast Stations (Fort Worth, Texas)*, MB Docket No. 08-147, RM 11474, DA 08-2249, released October 7, 2008.

common ownership with KTXA and was licensed on digital Channel 19 during the pre-transition period. Since the transition date, many of KTVT's viewers are experiencing significant difficulty in receiving KTVT's Channel 11 digital signal, as described elsewhere in the STA request. A separate request for STA is being filed contemporaneously for KTVT to use Channel 19.

A coverage contour map is supplied as **Figure 1**, demonstrating compliance with §73.625(a)(1) concerning principal community coverage. The contour comparison map of **Figure 2** supplies the coverage contours associated with the former KTXA analog Channel 21 facility and the proposed STA facility. The proposed STA operation is identical to the original Appendix B facility for KTXA, therefore the population match to Appendix B is 100.0 percent. Population counts using OET Bulletin 69² analysis show that the proposed STA facility's service population is 5,279,280 persons, which is 100.9 percent of the pre-transition analog Channel 21 facility's service population (5,262,858 persons).

A detailed interference study per OET Bulletin 69 shows that the use of the pre-transition Channel 18 facility during the post-transition period complies with the 0.5 percent limit of new interference caused to pertinent nearby post-transition stations and their Appendix B facilities, except for KYTX(DT) (Ch. 18 Nacogdoches, TX). The proposed STA facility would restore the pre-transition condition to KYTX, where KTXA causes 4.90 percent interference to the KYTX licensed facility and 7.55 percent interference to the KYTX Appendix B facility. The licensee of KYTX has agreed to accept this interference for the duration of the STA. The interference study output report is provided as **Table 1**. Protection requirements towards authorized Class A stations are also satisfied

Regarding RF exposure, calculations per FCC OET Bulletin Number 65 considering 10 percent antenna relative field in downward elevations show that the signal density near the tower at two meters above ground level attributable to the proposed facility is $0.3 \mu\text{W}/\text{cm}^2$, which is

²FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 ("OET-69"). The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein. A standard cell size of 2 km was employed. Comparisons of various results of this computer program (run on a Sun Sparc processor) to the Commission's implementation of OET-69 show excellent correlation.

0.1 percent of the general population/uncontrolled maximum permitted exposure limit. This is well below the five percent threshold limit described in §1.1307(b) regarding sites with multiple emitters, categorically excluding the applicant from responsibility for taking any corrective action in the areas where the proposal's contribution is less than five percent. The applicant will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from RF electromagnetic field exposure in excess of FCC guidelines.

Certification

The undersigned hereby certifies that the foregoing statement and associated attachments were prepared by him or under his direction, and that they are true and correct to the best of his knowledge and belief.

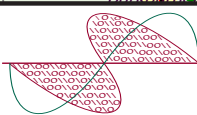


Joseph M. Davis, P.E.
July 6, 2009

Chesapeake RF Consultants, LLC
11993 Kahns Road
Manassas, VA 20112
703-650-9600

List of Attachments

Figure 1	Proposed STA Coverage Contours
Figure 2	Coverage Contour Comparison
Table 1	OET Bulletin 69 Interference Study

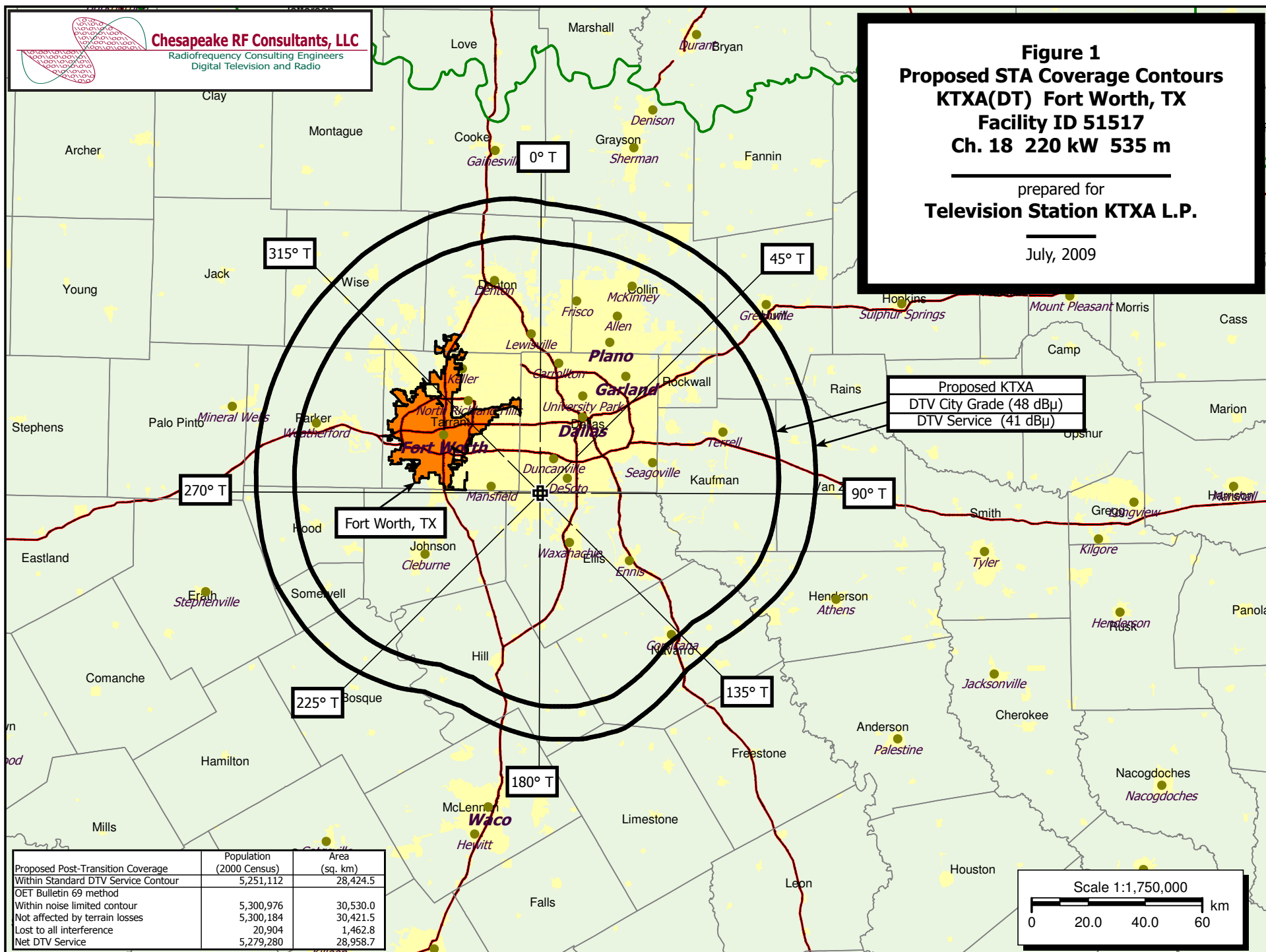


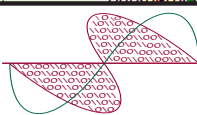
Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Figure 1
Proposed STA Coverage Contours
KTXA(DT) Fort Worth, TX
Facility ID 51517
Ch. 18 220 kW 535 m

prepared for
Television Station KTXA L.P.

July, 2009





Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

Figure 2
Coverage Contour Comparison
KTXA(DT) Fort Worth, TX
Facility ID 51517
Ch. 18 220 kW 535 m

prepared for
Television Station KTXA L.P.

July, 2009

Proposed Ch. 18 STA
DTV Noise-Limited Contour
(With dipole factor)

KTXA Former Analog
Ch. 21 BLCT-19801231KF
Grade B Contour

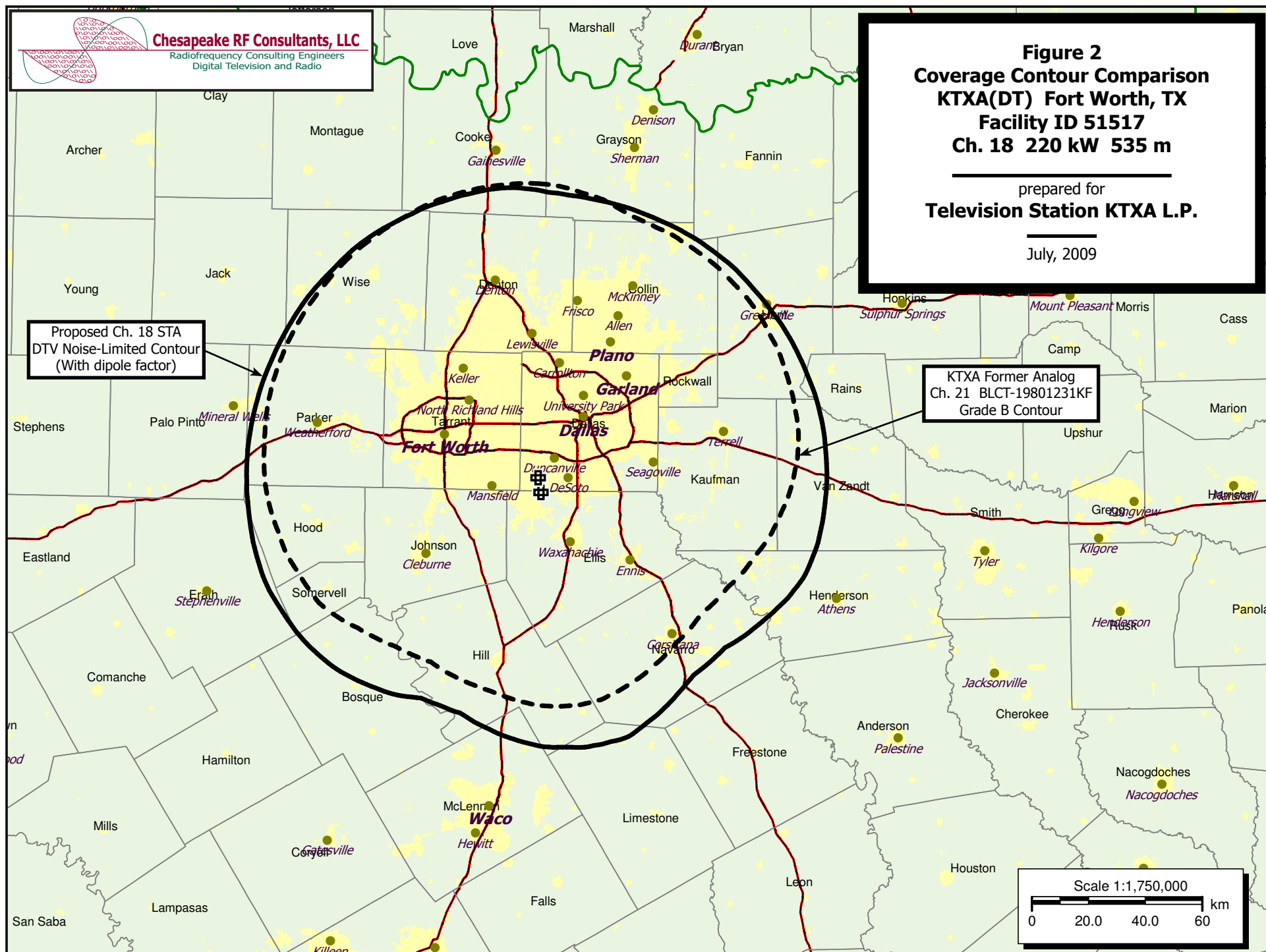
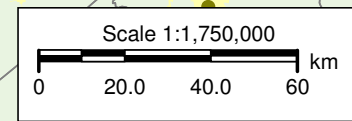


Table 1 KTXA(DT) OET Bulletin 69 Interference Study
(worst-case scenarios shown page 1 of 8)

TW Census data selected 2000
Post Transition Data Base Selected /space/software/cdbs/pt_tvdb.sff

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 06-24-2009 Time: 17:37:03

Record Selected for Analysis

KTXA-DT USERRECORD-01 FORT WORTH TX US
Channel 18 ERP 220. kW HAAT 535. m RCMSL 00738 m
Latitude 032-32-35 Longitude 0096-57-32
Status APP Zone 2 Border
Dir Antenna Make CDB Model 00000000019052 Beam tilt N Ref Azimuth 0.
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility meets maximum height/power limits

Azimuth (Deg)	ERP (kW)	HAAT (m)	41.0 dBu F(50,90) (km)
0.0	217.368	523.1	102.0
45.0	159.324	530.1	99.7
90.0	103.229	537.3	96.5
135.0	16.038	523.0	81.1
180.0	33.806	515.3	86.1
225.0	42.206	539.1	89.3
270.0	128.749	551.5	99.4
315.0	191.097	557.0	103.2

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quiet zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Table 1 KTXA(DT) OET Bulletin 69 Interference Study
(worst-case scenarios shown page 2 of 8)

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN
18	KTXA-DT	FORT WORTH TX	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
18	KNIC-DT	BLANCO TX	349.2	APP	BPCDT	-20080402ADA
18	KNIC-TV	BLANCO TX	349.2	PLN	DTVPLN	-DTVFP0649
18	KNIC-DT	BLANCO TX	349.2	CP	BPCDT	-20081209AEQ
18	KYTX	NACOGDOCHES TX	189.9	LIC	BLCDT	-20070810AAO
18	KYTX	NACOGDOCHES TX	189.9	PLN	DTVPLN	-DTVFP0653
19	KTXA-DR	FORT WORTH TX	4.0	APP	BPRM	-20080620AHA

Analysis of Interference to Affected Station 1

Channel	Call	City/State	Application	Ref. No.
18	KNIC-DT	BLANCO TX	BPCDT	-20080402ADA

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
18	KYTX	NACOGDOCHES TX	409.1	LIC	BLCDT	-20070810AAO
18	KYTX	NACOGDOCHES TX	409.1	PLN	DTVPLN	-DTVFP0653
18	KTXA-DT	FORT WORTH TX	349.2	APP	USERRECORD-01	

Total scenarios = 1

Result key: 1
Scenario 1 Affected station 1
Before Analysis

Results for: 18A TX BLANCO	BPCDT	20080402ADA	APP
HAAT 200.0 m, ATV ERP 1000.0 kW			
POPULATION	AREA (sq km)		
within Noise Limited Contour	1887391	22591.1	
not affected by terrain losses	1877008	22268.1	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	0	0.0	
lost to ATV IX only	0	0.0	
lost to all IX	0	0.0	

Potential Interfering Stations Included in above Scenario 1

After Analysis

Results for: 18A TX BLANCO	BPCDT	20080402ADA	APP
HAAT 200.0 m, ATV ERP 1000.0 kW			
POPULATION	AREA (sq km)		

Table 1 KTXA(DT) OET Bulletin 69 Interference Study
(worst-case scenarios shown page 3 of 8)

within Noise Limited Contour	1887391	22591.1
not affected by terrain losses	1877008	22268.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	2	8.1
lost to ATV IX only	2	8.1
lost to all IX	2	8.1

Potential Interfering Stations Included in above Scenario 1

18A TX FORT WORTH USERRECORD01 APP

Percent new IX = 0.0001%

Worst case new IX 0.0001% Scenario 1

#####

Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
18	KNIC-TV	BLANCO TX	DTVPLN	-DTVP0649

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
18	KYTX	NACOGDOCHES TX	409.1	LIC	BLCDDT	-20070810AAO
18	KYTX	NACOGDOCHES TX	409.1	PLN	DTVPLN	-DTVP0653
18	KTXA-DT	FORT WORTH TX	349.2	APP	USERRECORD-01	

Proposal causes no interference

#####

Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
18	KNIC-DT	BLANCO TX	BPCDDT	-20081209AEQ

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
18	KYTX	NACOGDOCHES TX	409.1	LIC	BLCDDT	-20070810AAO
18	KYTX	NACOGDOCHES TX	409.1	PLN	DTVPLN	-DTVP0653
18	KTXA-DT	FORT WORTH TX	349.2	APP	USERRECORD-01	

Total scenarios = 1

Result key: 2
Scenario 1 Affected station 3
Before Analysis

Results for: 18A TX BLANCO	BPCDDT	20081209AEQ	CP
HAAT 200.0 m, ATV ERP 400.0 kW			
within Noise Limited Contour	POPULATION	AREA (sq km)	
not affected by terrain losses	1828685	19301.0	
	1821196	18933.6	

Table 1 KTXA(DT) OET Bulletin 69 Interference Study
(worst-case scenarios shown page 4 of 8)

lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	0	0.0

Potential Interfering Stations Included in above Scenario 1

After Analysis

Results for: 18A TX BLANCO	BPCDDT	20081209AEQ	CP
HAAT 200.0 m, ATV ERP 400.0 kW			
within Noise Limited Contour	POPULATION	AREA (sq km)	
not affected by terrain losses	1828685	19301.0	
lost to NTSC IX	1821196	18933.6	
lost to additional IX by ATV	0	0.0	
lost to ATV IX only	109	8.1	
lost to all IX	109	8.1	
	109	8.1	

Potential Interfering Stations Included in above Scenario 1

18A TX FORT WORTH USERRECORD01 APP

Percent new IX = 0.0060%

Worst case new IX 0.0060% Scenario 1

#####

Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
18	KYTX	NACOGDOCHES TX	BLCDDT	-20070810AAO

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	KSLA-TV	SHREVEPORT LA	137.9	CP	BPCDDT	-20080620ALI
17	KSLA-TV	SHREVEPORT LA	137.9	PLN	DTVPLN	-DTVP0598
17	KSLA-TV	SHREVEPORT LA	137.9	LIC	BLCDDT	-20020501AAS
18	WMAU-TV	BUDE MS	414.3	CP MOD	BMPEDT	-20090121AHA
18	WMAU-TV	BUDE MS	414.3	PLN	DTVPLN	-DTVP0641
18	KNIC-DT	BLANCO TX	409.1	APP	BPCDDT	-20080402ADA
18	KNIC-TV	BLANCO TX	409.1	PLN	DTVPLN	-DTVP0649
18	KNIC-DT	BLANCO TX	409.1	CP	BPCDDT	-20081209AEQ
19	KTXA-DR	FORT WORTH TX	190.9	APP	BPRM	-20080620AHA
19	KTXA	FORT WORTH TX	189.9	PLN	DTVPLN	-DTVP0695
18	KTXA-DT	FORT WORTH TX	189.9	APP	USERRECORD-01	

Total scenarios = 3

Result key: 3
Scenario 1 Affected station 4
Before Analysis

Results for: 18A TX NACOGDOCHES	BLCDDT	20070810AAO	LIC
HAAT 457.0 m, ATV ERP 640.0 kW			

Table 1 KTXA(DT) OET Bulletin 69 Interference Study
(worst-case scenarios shown page 5 of 8)

	POPULATION	AREA (sq km)
within Noise Limited Contour	814881	31504.5
not affected by terrain losses	813250	31416.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	9127	487.7
lost to ATV IX only	9127	487.7
lost to all IX	9127	487.7

Potential Interfering Stations Included in above Scenario 1

17A LA SHREVEPORT BPCDT 20080620ALI CP

After Analysis

Results for: 18A TX NACOGDOCHES	BLCDT	20070810AAO	LIC
HAAT 457.0 m, ATV ERP 640.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	814881	31504.5	
not affected by terrain losses	813250	31416.5	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	48566	1958.8	
lost to ATV IX only	48566	1958.8	
lost to all IX	48566	1958.8	

Potential Interfering Stations Included in above Scenario 1

17A LA SHREVEPORT BPCDT 20080620ALI CP
18A TX FORT WORTH USERRECORD01 APP

The following station failed the de minimis interference criteria.

18D TX FORT WORTH USERRECORD01
ERP 220.00 kW HAAT 535.0 m RCAMSL 738.0 m
Antenna CDB 00000000019052

Due to interference to the following station and scenario: 1
18D TX NACOGDOCHES BLCDT 20070810AAO
ERP 640.00 kW HAAT 457.0 m RCAMSL 571.0 m
Antenna CDB 00000000080275

Percent new interference from proposal: 4.9046 to BLCDT 20070810AAO

Worst case new IX 4.9046% Scenario 1

#####

Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
18	KYTX	NACOGDOCHES TX	DTVPLN	-DTVP0653

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	KSLA-TV	SHREVEPORT LA	137.9	CP	BPCDT	-20080620ALI
17	KSLA-TV	SHREVEPORT LA	137.9	PLN	DTVPLN	-DTVP0598
17	KSLA-TV	SHREVEPORT LA	137.9	LIC	BLCDT	-20020501AAS
18	WMAU-TV	BUDE MS	414.3	CP MOD	BMPEDT	-20090121AHA
18	WMAU-TV	BUDE MS	414.3	PLN	DTVPLN	-DTVP0641
18	KNIC-DT	BLANCO TX	409.1	APP	BPCDT	-20080402ADA

Table 1 KTXA(DT) OET Bulletin 69 Interference Study
(worst-case scenarios shown page 6 of 8)

18	KNIC-TV	BLANCO TX	409.1	PLN	DTVPLN	-DTVP0649
18	KNIC-DT	BLANCO TX	409.1	CP	BPCDT	-20081209AEQ
19	KTXA-DR	FORT WORTH TX	190.9	APP	BPRM	-20080620AHA
19	KTXA	FORT WORTH TX	189.9	PLN	DTVPLN	-DTVP0695
18	KTXA-DT	FORT WORTH TX	189.9	APP	USERRECORD-01	

Total scenarios = 9

Result key: 6

Scenario 1 Affected station 5
Before Analysis

Results for: 18A TX NACOGDOCHES	DTVPLN	DTVP0653	PLN
HAAT 457.0 m, ATV ERP 640.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	906195	38720.0	
not affected by terrain losses	904770	38612.0	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	11838	699.6	
lost to ATV IX only	11838	699.6	
lost to all IX	11838	699.6	

Potential Interfering Stations Included in above Scenario 1

17A LA SHREVEPORT BPCDT 20080620ALI CP
19A TX FORT WORTH DTVPLN DTVP0695 PLN

After Analysis

Results for: 18A TX NACOGDOCHES	DTVPLN	DTVP0653	PLN
HAAT 457.0 m, ATV ERP 640.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	906195	38720.0	
not affected by terrain losses	904770	38612.0	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	79230	3709.7	
lost to ATV IX only	79230	3709.7	
lost to all IX	79230	3709.7	

Potential Interfering Stations Included in above Scenario 1

17A LA SHREVEPORT BPCDT 20080620ALI CP
18A TX FORT WORTH USERRECORD01 APP

The following station failed the de minimis interference criteria.

18D TX FORT WORTH USERRECORD01
ERP 220.00 kW HAAT 535.0 m RCAMSL 738.0 m
Antenna CDB 00000000019052

Due to interference to the following station and scenario: 1
18D TX NACOGDOCHES DTVPLN DTVP0653
ERP 640.00 kW HAAT 457.0 m RCAMSL 571.0 m
Antenna CDB 999999999999999

Percent new interference from proposal: 7.5473 to DTVPLN DTVP0653

Worst case new IX 7.5473% Scenario 1

#####

Table 1 KTXA(DT) OET Bulletin 69 Interference Study
(worst-case scenarios shown page 7 of 8)

Analysis of Interference to Affected Station 6					
Analysis of current record					
Channel	Call	City/State	Application Ref. No.		
19	KTXA-DR	FORT WORTH TX	BPRM	-20080620AHA	
Stations Potentially Affecting This Station					
Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
18	KYTX	NACOGDOCHES TX	190.9	LIC	BLCDT -20070810AAO
18	KYTX	NACOGDOCHES TX	190.9	PLN	DTVPLN -DTVP0653
19	KTXA	FORT WORTH TX	4.0	PLN	DTVPLN -DTVP0695
19	KTXH	HOUSTON TX	362.3	LIC	BLCDT -20020514AAE
19	KTXH	HOUSTON TX	362.3	PLN	DTVPLN -DTVP0696
19	KTXH	HOUSTON TX	362.3	CP	BPCDT -20080619AAW
19	KIDY	SAN ANGELO TX	353.1	CP	BPCDT -19991029AFV
19	KIDY	SAN ANGELO TX	353.1	PLN	DTVPLN -DTVP0698
20	KWBUTV	WACO TX	144.5	LIC	BLEDT -20060622AAS
20	KWBUTV	WACO TX	144.5	PLN	DTVPLN -DTVP0738
18	KTXA-DT	FORT WORTH TX	4.0	APP	USERRECORD-01
Proposal causes no interference					
#####					
Analysis of Interference to Affected Station 7					
Analysis of current record					
Channel	Call	City/State	Application Ref. No.		
18	KTXA-DT	FORT WORTH TX	USERRECORD-01		
Stations Potentially Affecting This Station					
Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
18	KNIC-DT	BLANCO TX	349.2	APP	BPCDT -20080402ADA
18	KNIC-TV	BLANCO TX	349.2	PLN	DTVPLN -DTVP0649
18	KNIC-DT	BLANCO TX	349.2	CP	BPCDT -20081209AEQ
18	KYTX	NACOGDOCHES TX	189.9	LIC	BLCDT -20070810AAO
18	KYTX	NACOGDOCHES TX	189.9	PLN	DTVPLN -DTVP0653
19	KTXA-DR	FORT WORTH TX	4.0	APP	BPRM -20080620AHA
Total scenarios = 16					
Result key: 16					
Scenario 2 Affected station 7					
Before Analysis					
Results for: 18A TX FORT WORTH			USERRECORD01		APP
HAAT 535.0 m, ATV ERP 220.0 kW					
			POPULATION	AREA (sq km)	
within Noise Limited Contour			5300976	30530.0	
not affected by terrain losses			5300184	30421.5	
lost to NTSC IX			0	0.0	
lost to additional IX by ATV			20904	1462.8	
lost to ATV IX only			20904	1462.8	
lost to all IX			20904	1462.8	
Potential Interfering Stations Included in above Scenario 2					
18A TX BLANCO DTVPLN DTVP0649 PLN					

Table 1 KTXA(DT) OET Bulletin 69 Interference Study
(worst-case scenarios shown page 8 of 8)

18A TX NACOGDOCHES	DTVPLN	DTVP0653	PLN
#####			
FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED			